

High Mountain Dams in Bonneville Unit,
Weir Lake Dam (North Fork No. 2 Lake Dam)
Wasatch National Forest
3.8 miles west of Trial Lake Campground
Kamas vicinity
Summit County
Utah

HIAER No. UT-41-O

HAER
UTAH,
22-KAM.V,
1-0-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
Rocky Mountain Regional Office
National Park Service
U.S. Department of the Interior
P.O. Box 25287
Denver, Colorado 80537

HISTORIC AMERICAN ENGINEERING RECORD

HAER
UTAH,
22-KAM.V,
1-0-

High Mountain Dams in Bonneville Unit, Weir Lake Dam
(North Fork No. 2 Lake Dam)

HAER No. UT-41-O

Location: 3.8 miles west of Trial Lake Campground, Wasatch National Forest,
Kamas vicinity, Summit County, Utah

UTM: 12.499790.4502430
Quad: Erickson Basin

Date of Construction: 1934

Builder/Designer: Provo Reservoir Company, Provo, Utah

Present Owner: Union Reservoir Company, Heber City, Utah 84032

Original Use: Dam

Present Use: Dam

Significance: Weir, Fire and Pot lakes, all built in 1934 by the Provo Reservoir Company,
are indicative of the renewed local interest in reservoir-building sparked by
the drought of 1931. They are historically significant as among the last
examples of private reservoir construction in the Provo River drainage. The
Weir Lake Dam is the longest of two masonry retention structures in the
Bonneville Unit. Essentially unaltered and well preserved, it is one of the
most technically significant dams in the unit.

Inventoried by: Clayton Fraser and James Jurale
Fraserdesign
Loveland, Colorado

October 17, 1985

HISTORICAL INFORMATION

In July 1914, the National Forest Service grant a special use permit to the Provo Reservoir Company of Provo, Utah, to construct a dam and impound water on Weir Lake for irrigation. The second smallest among the dammed lakes at the headwaters of the Provo River drainage, Weir Lake was an irregularly shaped natural body of water with a steeply sloped and timbered, rocky shoreline. The small stream that drained Long Lake flowed Weir through a marsh at its northern end. The Weir Lake Dam was completed in 1934 and, like the Fire Lake Dam that was built at the same time, featured a grouted fieldstone masonry upstream face and loose hand-placed rock on the sloped downstream side. The outlet gate was a standard Hardesty cast iron slide gate secured by a 12-gauge pipe embedded in concrete. A concrete spillway on the dam's eastern edge is situated on quartzite ledge rock. Dam, outlet and spillway all remain in good condition. It is proposed that the existing spillway be lowered and the outlet pipe blocked to lower the lake to its natural level.

ARCHITECTURAL INFORMATION

Dam length: 248 feet
Dam height: 15 feet
Dam width: 27 feet
Construct: Grouted fieldstone dam with hand-placed stone riprap on downstream side
Lake size: 14.0 acres; 17107 acre-foot maximum capacity; 15 vertical foot maximum drawdown
Outlet: 18" concrete box culvert with gate; concrete spillway

BIOGRAPHICAL INFORMATION

"Preliminary Engineering Report: Stabilization of High Mountain Lakes, Provo River Drainage, National Forest Service Report, 1969, pages 72-73.

Specifications for North Fork Lake No. 1 under Application 2077, Provo Reservoir Company, Lost Lake No. 2 Supplemental File, W-CNFSO, Federal building, Salt Lake City, Utah.

Weir Lake Reservoir File #16-M, Kamas Ranger Station, Wasatch National Forest, Kamas, Utah

Field inspection by Clayton Fraser and Robert Righter, July 24, 1985.

For additional information, see Irrigation Canals in the Uinta Basin, HAER No. UT-30.

High Mountain Dams in Bonneville Unit,
Weir Lake Dam (North Fork No. 2 Lake Dam)
HAER No. UT-41-O
(Page 3)

